

ERNEST, Jerzy (Lodz, ul. Brzezna 12, m 5)

Adhesive arachnitis in the region of the optic chiasm. Polski
cygod. lek. 9 no.29:915-917 19 July 54.

l. Z Zakladu Medycyny Sadowej A.M. w Lodzi, kierownik: prof.
dr Bronislaw Puchowski.

(ARACHNOID, diseases,
arachnitis, adhesive, in region of optic chiasm)

ERNEST, Jerzy

Diagnosis of air embolism in autopsy. Polski tygod. lek. 9
no.46:1484-1487 15 Nov 54.

1. Z Zakladu Medycyny Sadowej A.M. w Lodz; kierownik: prof.
dr B.Puchowski.

(EMBOLISM,
air, diag. in autopsy, technic)
(AUTOPSY,
diag. of air embolism, technic)

ERNEST, Jerzy (Lodz, Brzezna 12)

Cases of air embolism in obstetrics and gynecology. Gin. polska
25 no.4:345-353 Oct-Dec 54.

1. **Z Zakladu Medycyny Sadowej Akademii Medycznej w Lodzi. Kierownik:**
prof. dr. B.Puchowski.

(EMBOLISM,
air, in obst.)
(PREGNANCY, complications,
air embolism)
(DELIVERY, complications,
air embolism)

ERNEST, Jerzy

Pathogenesis of vesicular emphysema of the intestines. Polski
przegl.chir. 27 no.3: 251-254 Mar '55.

1. Z Zakladu Medycyny Sadowej A.M. w Lodzi. L. Kierownik: prof.
dr. B.Puchowski, Lodz, ul. Brzeska 12 m. 5.

(EMPHYSEMA,

vesicular of stomach & duodenum causing pulm. air
embolism)

(PULMONARY EMBOLISM AND THROMBOSIS

air embolism caused by vesicular emphysema of
stomach & duodenum)

(STOMACH, diseases

vesicular emphysema causing pulm.air embolism)

ERNEST, L.

ERNEST, L. Decomposition of diazo ketenes by cuprous oxide. IV. Attempt at selective reduction of unsaturated 1, 4-diketones. p. 581. Vol. 50, no. 4, Apr. 1956. CHEMICKÉ LISTY. Praha, Czechoslovakia.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

ERNEST, O.

TECHNOLOGY

Periodical: REVISTA INDUSTRIEI ALIMENTARE. PRODUSE ANIMALE. No. 1,
1958.

A square sea-fishing net; a fishing implement with electric light,
unknown is Rumania. p. 9.

ERNEST, O.

Monthly List of East European Accession (EEAI), LC. Vol. 8, No 3
March 1959, Unclass.

ERNEST, R.

TECHNOLOGY

Periodicals: HIDROTEHNICA. Vol. 3, no. 9, Sept. 1958

ERNEST, R. Hydroameliorative works in Rumania. p. 365

Monthly List of East European Accessions (EIAI) LC, Vol. 8, No. 2,
February 1959, Unclass.

IGO, Janos, dr.; ERNESZT, Judit, dr.; ZOLTAN, Imre, dr.

The preparation of pregnant women with heart diseases for delivery. Magy. noorv. lap. 18 no.4:214-217 July 55.

1. A Budapesti Orvostudomanyi Egyetem II. sz. noi klinikajának közlömenye. (Igazgató: Zoltan, Imre dr. egyetemi tanár).

(HEART DISEASE, in pregn.

hospitalization & prep. for delivery, comparison of results with unprep. patients. (Hun))

(PREGNANCY, in various dis.

heart dis., hospitalization & prep. for delivery, comparison of results with unprep. patients. (Hun))

(PRENATAL CARE

hospitalization & prep. of heart dis. patients for delivery. (Hun))

ERNESZT, Judit, dr.

Prognostic value of ballistocardiography of pregnant women with heart diseases. Magy.noorv.lap. 20 no.6:328-334 N '59.

1. A budapesti Orvostudomanyi Egyetem II. sz. Női Klinikájának
kísleménye (Igazgató: Zoltan Imre dr. egyetemi tanár).

(PREGNANCY compl)

(HEART DISEASES in pregn)

(BALLISTOCARDIOGRAPHY)

ERMESZT, Judit, dr.; RIGO, Janos, dr.

Certain cases of congenital cardiac defects complicated by pregnancy. Magy.noorv.lap. 21 no.1:31-34 Ja '60.

1. A Budapesti Orvostudomanyi Egyetem II. sz. noi klinikajának
közleménye (Igazgató: Zoltan Imre dr. egyetemi tanár).
(HEART DEFECTS CONGENITAL in pregn)
(PREGNANCY compl)

ERNESZT, Judith, dr.; RIGO, Janos, dr.

Mortality of cardiac patients in labor. Magy noorv. lap. 24 no.1:3-9
Ja '61.

1. Budapesti Orvostudomanyi Egyetem II sz. Női Klinika janak kosleménye
(Igazgató: Zoltan Imre dr. egyetemi tanár)

(MATERNAL MORTALITY) (HEART DISEASE in pregn)
(PREGNANCY compl)

ERNEY, Gheorghe, ing. (Budapest.)

Calculation and control of the chamfering of toothings in
evolute toothed wheels with straight teeth. Constr. mas
16 no. 6:305-310 Je'64

ERNEY, Gyorgy, okleveles gépeszmernök

New nomenclature of gear wheels. Jármi műszöv. 8 no.11:
439-440 N '61.

ERNEY, Gyorgy.

New nomenclature of gears. Gep 13 no.12:477-478 D '61.

ERNEY, Gyorgy, okleveles gépmérnök

Accuracy standard of cylindrical gears. Jarmu mezo gep 9 no.12:466-
475 D '62.

ERNEY, G., dipl., inz. (Budapest); ZEMAN, K., dr., inz. [translator]

Calculating and checking the modification of gears with involute straight teeth. Strojirenstvi 12 no.4:257-261 Ap '62.

ERNEY, Gyorgy

Calculation and control of cutting the addendum of the straight
involute toothed cylindrical wheels. Muszaki kozl MTA 30 no.1/4:
185-196 '62.

5

ERNEY, Gyorgy, okleveles gepeaszternek

Precision standard of cylindrical wheels. Gep 15 no.6:
231-241 Je '63.

1. GANZ-MAVAG Mozdony-, Wagon- es Gepgyar, Budapest.

ROHONYI, Vilmos, okleveles gepeszmernok (Rumania); ERNEY, Gyorgy

Method for hobbing cylindrical gears to produce depth of teeth without additional feed. Gep 16 no.12;474-477 D '64.

FRIEHAFT, J.; FAHAN, GY.

Investigations concerning variability of the presacral vertebrae in rabbits.
p. 141.

A MAGYAR TUDOMANYOS AKADEMIA V. OKZTALAY BIOGLAI CSOPORTJAHAK KOSIEMESEI.
Budapest, Hungary. Vol. 3, no. 2, 1959

Monthly List of East European Accessions (FEAI), LC, Vol. 9, no. 1, Jan., 1960

Uncl.

ERNHAFT, J., FABIAN, GY.

Investigations concerning the variability of the presacral vertebrae in rabbits.
In English, p. 49

ACTA BIOLOGICA, Budapest, Hungary, Vol. 10, No. 1, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1960
Uncl.

ERNHAFT, Jozsef

Changes in quantitative characteristics in growing hen varieties
in presence of dominant mutation. Biol tud kozl MTA 5 no.3-4:
245-262 '62.

1. Magyar Tudomanyos Akademia Allatgenetikai Kutato Csoport-
ja, Agraregyletem, Allattani Tanszek, Godollo.

✓

ERNHARDT, Janos

The Baratsag oil pipeline has been put into operation. Musz elet
17 no.21:5 11 0 '62.

ERNIO, R.

Strengthen the international solidarity of workers. Sov.
profsoiuzy 19 no.19:40-41 O '63. (MIRA 16:11)

1. Sekretar' Vsemirnoy federatsii professional'nykh soyuzov.

ERNIS, I.

AID P - 393

Subject : USSR/Aeronautics

Card 1/1 Pub. 135, 7/18

Author : Ernis, I., First Lt.

Title : Determination of the travelling speed of an aircraft

Periodical : Vest. vozd. flota, 8, 39-40, Ag 1954

Abstract : The author suggests a new method of determination of the travelling speed of an aircraft. The method lightens calculations, does not require complicated computations, and uses only a small table. Formulae, table.

Institution : None

Submitted : No date

ERNO, I.; HADNAGY, M.

"The dispatcher system in an establishment of the pulp and paper industry. Tr from the Hungarian" (P. 241). PRZEGLAD PAPIERNICZY (Centralny Zarzad Przemyslu Papierniczego i Stowarzyszenie Inżynierow i Technikow Przemyslu Papierniczego) Łódz, Vol. 9, No. 1, Aug. 1953.

SO: East European Accessions List, Vol 3, No. 8, Aug 1954.

KOLIN, Mirko, inz.; ERNOIC, Josip, inz.

Applicability of the PK-3 mining combine tested in the pit of Ladanje
of the Ivanec-Ladanje Colliery, Ivanec. Rudar glasnik no.3:65-69 '62.

1. Ivanecko-ladanjski ugljenokop, Ivanec.

L 44056-66 EXP(J)/T IJP(c) RM
ACC NR: AP6032674

SOURCE CODE: HU/0005/66/000/002/0077/0078

AUTHOR: Kollar, Laszlo; Borocz, Laszlo--Berets, L.; Simon, Artur--Shimon, A.; Ernő Horvath
ORG: Research Institute for the Plastics Industry, Budapest (Muanyagipari Kutato Intezet)

TITLE: Study of the $\alpha\text{-TiCl}_3\text{-AlEt}_3$ catalyst system

SOURCE: Magyar kemiai folyoirat, no. 2, 1966, 77-78

TOPIC TAGS: propylene, catalytic polymerization

ABSTRACT: The effects of the $\text{TiCl}_3\text{:AlEt}_3$ ratio on the polymerization of propylene was investigated in terms of the reaction taking place between these two catalyst components (cf. Simon, A., Kollar, L., and Borocz, L.; Monatsh. Chem., vol. 95, 1964, p. 842). In general, this reaction reduced the effectiveness of the system as a catalyst. The extent of this effect was followed by an X-ray determination of the crystalline TiCl_3 content in the catalyst mixture. The X-ray determinations were performed by the Department for Polymer Micromorphology (Polímermikromorfologai Osztály) at the Research Institute for the Plastics Industry. Orig. art. has: 5 figures. [JPRS: 34,805]

SUB CODE: 07 / SUBM DATE: 08Jun65 / OTH REF: 005

Card 1/1 blg

0919 2799

E.R.N.S.T., B.M.

PHASE I BOOK EXPLOITATION	SOV/3369
21(1,8); 24(5)	
Veseyannaya meshchisovskaya konferentsiya po kvantovoy teorii polya i teorii elementarnykh chastits.	
Problemy sovremennoy teorii elementarnykh chastits. No. 2: Teoriya konferentsii... [Problems in the Modern Theory of Elementary Particles. No. 2: Transactions of the All-Union Inter-Union Conference on the Quantum Field Theory and the Theory of Elementary Particles] Uzhgorod, Zakarpatskoye oblastnoye izd-vo, 1959. 217 p. 5,000 copies printed.	No. 2: Teoriya konferentsii... [Problems in the Modern Theory of Elementary Particles. No. 2: Transactions of the All-Union Inter-Union Conference on the Quantum Field Theory and the Theory of Elementary Particles] Uzhgorod, Zakarpatskoye oblastnoye izd-vo, 1959. 217 p. 5,000 copies printed.
M.: Yu. Lomakina. Docent; Tech. Ed.: M. Balous.	
PERIOD: This book is intended for physicists, particularly those concerned with problems in the field of elementary particles and the quantum theory.	
CONTENTS: This book contains articles on elementary particles originally read at the All-Union Inter-Union Conference held at Uzhgorod State University on October 20, 1958. Among the topics discussed are: the spinor field theory; the fusion theory; Lorentz contractions; parity studies; nucleon-nucleon scattering, etc. English abstracts accompany each article. References follow each article.	CONTENTS: This book contains articles on elementary particles originally read at the All-Union Inter-Union Conference held at Uzhgorod State University on October 20, 1958. Among the topics discussed are: the spinor field theory; the fusion theory; Lorentz contractions; parity studies; nucleon-nucleon scattering, etc. English abstracts accompany each article. References follow each article.
Bol'dinov, A.Z. Polarization of Quanta Emitted by μ Mesons 138	
Barashenkov, V.I. Optical Analysis of the Interaction Between Fast Nucleons and Pions Particles With Nucleus 142	
Shatkov, G.V. The Semi-phenomenological Theory of Nuclear Forces 149	
Fizichesk. Yez. and S. Chubili. Partial Wave Analysis of the Generation of Particles 157	
Klatis-Lazar, and P.S. Lazar. The Effect of the Form-Pactor on the Processes of Bremsstrahlung and Generation of Pairs on Protons 165	
Millikan-Lil. On the Interaction Between Δ -Particles and Nucleons in the Nucleus 175	
Lomakina, T.M. The 1-Summation of the Perturbation Series 182	
Lomakina, T.M., V.I. Landau, and I.Yu. Krywicki. The Problem of Nucleon-Nucleon Scattering in High-Energy Regions 195	
Lomakina, T.M., V.I. Landau, I.Yu. Krywicki, L.P. Leksin, and M. Smetanin. Application of the Modified Perturbation Method to the Interpretation of the Nucleon-Nucleon Scatterings 211	

LOMSAIDZE, Yu.M.; LEND'EL, V.I.; ERNST, B.M.

Behavior of the total cross sections of \bar{p} -scattering at high energies. Zhur. eksp. i teor. fiz. 39 no.4:1154-1155 O '60.
(MIRA 13:11)

1. Uzhgorodskiy gosudarstvennyy universitet.
(Protone--Scattering)

S/058/61/000/006/006/063
A001/A101

24.4500

AUTHORS: Lend'yel, V.I., Lomsadze, Yu.M., Ernst, B.M.

TITLE: The application of the "strong" coupling method to a simplest model

PERIODICAL: Referativnyy zhurnal. Fizika, no. 6, 1961, 30, abstract 6A315 ("Dokl. i soobshch. Uzhgorodsk. un-t. Ser. fiz.-matem. n.", 1960, no. 3, 31-32)

TEXT: To check the relativistic method of strong coupling in the field theory (abstract 6A314), the author considers an example, the equation of a harmonic oscillator placed into a field of external forces. It is shown that already the first approximation, in a case of a strong external field, makes it possible to find the wave function at $t = 0$ with a very high precision.

K.T.-M.

[Abstracter's note: Complete translation]

JB

Card 1/1

LOMSADZE, Yu.M.; LEND'YEL, V.I. [Lend'iel, V.I.]; ERNST, B.M.

Parity doublet of π -mesons and Chew's approximation method.
Ukr. fiz. zhur. 5 no.6:773-776 N-D '60 (MIRA 14:3)

1. Uzhgorodskiy gosudarstvennyy universitet.
(Mesons)

ERNST, B. M.

5/25/41/049/010/046/100
AGG1/L161

AUTHORS: Lomaadze, Yu. M., Lend'yel, V. I., Krivskiy, I. Yu., Fushchich, V. I., Khimich, I. V., Lukin, L. P., Ernst, B. M.

TITLE: On applying modified perturbation method to interpretation of nucleon scattering

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 25, abstract 10A257
(V sb. "Probl. sovrem. teorii elementarn. chastits", no. 2, Uzhgorod, 1959, 211-216, Engl. summary)

TEXT: Differential effective cross sections for all types of NN-scattering have been determined in the first non-vanishing approximation of the modified perturbation method (consisting in a special summation over all simplest baryon loops inserted into internal \bar{q} -meson lines of the Feynman 2nd-order graphs); assumptions are made on existence of scalar \bar{q} -mesons and violation of charge independence of nuclear forces at high energies. The cross sections calculated for the range 100 - 600 Mev agree sufficiently well with experimental data. Thereby the results of the preceding study (abstract 10A256) are additionally substantiated. An interesting possibility is discussed that at sufficiently

Card 1/2

On applying modified perturbation ...

8/058/61/000/010/006/100
A001/A101

great coupling constant, the scattering cross section may be completely independent of its value.

[Abstracter's note: Complete translation] ✓

Card 2/2

S/058/62/000/007/010/068
A061/A101

AUTHORS: Lend'yel, V. I., Lomsadze, Yu. M., Ernst, B. M.

TITLE: Parametric correlation in the effective range theory using
Mandel'shtam's dispersion relations

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1962, 29, abstract 7A274
("Dokl. i soobshch. Uzhgorodsk. un-t. Ser. fiz.-matem. n.", 1961,
no. 4, 19 - 21)

TEXT: The authors proceeded from the analytic characteristics of the
energy variable of the singlet amplitude of fixed angle p-p scattering, and used
a new form of approximation of experimental data (in accordance with the general
scheme of Cini, Fubini, Stanghellini - RZhFiz, 1960, no. 4, 7765) to determine
more accurately the coupling constant f^2 which turned out to be somewhat less
than the universally adopted value $f^2 = 0.08$. They also succeeded in determining
the parameters of the effective range theory, and found them to be very near
those specific to the Yukawa potential.

V. Lend'yel

[Abstracter's note: Complete translation]

Card 1/1

S/056/62/043/003/036/063
B108/B102

AUTHORS: Lend'yel, V. I., Lomsadze, Yu. M., Ernst, B. M.

TITLE: A more exact determination of parameters of the effective radius theory with the aid of Mandelstam's dispersion relations

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 3(9), 1962, 974 - 976

TEXT: On the basis of the Mandelstam dispersion representation for scalar NN-scattering amplitudes, M. Cini et al. (Phys. Rev., 114, 1633, 1959) have proposed a function $F(\omega)$ which makes it possible to determine the coupling constant f^2 by extrapolation from the region $\omega > 0$ to the non-physical point $\omega = -1/2$. ω is the square momentum of the nucleon. To approach that pole the authors suggest an "inverse" polynomial of the form $\omega = A_0 + A_1 F(\omega) + A_2 F^2(\omega) + A_3 F^3(\omega) + \dots$. At the non-physical point $\omega = -1/2$, the function $F(-1/2) = -1/\sqrt{2}$. Extrapolation of experimental data on low-energy pp-scattering distribution led to the coupling

Card 1/2

A more exact determination of...

S/056/62/043/003/036/063
B108/B102

constant $f^2 = 0.058 \pm 0.005$. The following parameters of the effective radius theory were calculated: $a_{\text{equiv}} = -17.6 \cdot 10^{-13}$ cm, $r = 2.80 \cdot 10^{-13}$ cm, $P = 0.045$, $Q = 0.0127$. These numerical values indicate that the nucleon interaction potential at low energies is a Yukawa type potential. There is 1 table.

ASSOCIATION: Uzhgorodskiy gosudarstvennyy universitet (Uzhgorod State University)

SUBMITTED: March 29, 1962

Card 2/2

L-16517-63 EWT(m)/BDS AFFTC/ASD
ACCESSION NR: AR3005147

8/0058/63/000/006/1028/3028

52

SOURCE: RZh. Fizika, Abs. 6 B212

AUTHOR: Lend'yal, V. I.; Ernst, B. M.

TITLE: Use of analyticity conditions of the scattering amplitude for the determination of the coupling constant

CITED SOURCE: Dokl. i soobshch. Uzhgorodsk. un-t. Ser. fiz.-matem. i istor. n., no. 5, 1962, 14-16

TOPIC TAGS: Scattering amplitude, analyticity condition, coupling constant

TRANSLATION: The experimental data on the singlet pp-scattering amplitude are approximated by an energy function having the same nearest branch points on the real axis as the proposed exact amplitude. The authors obtain for the pion-nucleon coupling constant a value $f^2 = 0.046 \pm 0.004$ instead of the customary value ($f^2 = 0.08$).

DATE ACQ: 15Jul63

SUB CODE: PH

ENCL: 00

Card 1/1

LEND'YEL, V.I.; LOMSADZE, Yu.M.; ERNST, B.M.

A more accurate presentation of the effective radius theory obtained
with the aid of the Mandel'stam dispersion relations. Zhur. eksp. i
teor. fiz. 43 no.3:974-976 '62. (MIRA 15:10)

1. Uzhgorod'skiy gosudarstvennyy universitet.
(Protons—Scattering)

ERNST, I.

Rules for the nomenclature of vitamins. Chem listy 57 no.2:151-155
F '63.

ERNST.

CM

PROCESSES AND PROPERTIES
A method for the determination of lactic acid in blood.
Irad Krasz and József Truka. Magyar Orvosi Arch. 35,
380-91 (1934).—Blood which contains heparin as an
anticoagulant is稀释, with 0.9% NaCl and centrifuged to
remove the formed elements. The plasma is deproteinized
Ca(OH)₂ and ZnSO₄. To the protein-free filtrate FeCl₃
is added and the yellow color thus produced compared
with standard Li lactate soln. The accuracy of the
method is 5%. Henry Tauber

118

ALB-SLA - METALLURGICAL LITERATURE CLASSIFICATION

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STURZ, J.
(6543)

Fecsi Tudományos Gyakorló Biológiai Intézetében. Az ide előzetes határozata The degree of muscular work Orvosi Hetilap 1949, 90/8 (225-230) Graphs 3

The efficiency usually calculated, ie. work done in relation to heat development should not be confused with true efficiency; it is at best an economic efficiency and is misleading, because the muscle is not a heat engine. Even when the work done is comparable with the heat developed, only that part of the heat can be taken into account which is directly connected with the function, and this is only a fraction of the total. There is a reversible part in muscle activity, which corresponds to a crystallization process in muscle. When the muscle shortens it will always find an obstacle which prevents its further shortening; this automatically leads to crystallization and the later process produces additional tension. The adductor of Venus verrucosa produces tension for a long time with practically no increase of metabolism. In this case, as in the case of smooth muscle, crystallization is probably of prime importance. It is obvious that the efficiency defined in textbooks yields absurd results in these cases.

Straub-Budapest

So: Excerpta Medica, Vol. II, No. 12, Sec. II, December 1949

ERNST, E.

(S)

The state of the binding of water and electrolytes in muscle. E. Ernst, J. Tigyí, and A. Zahorecsk (Univ. Pécs). *Acta Physiol. Acad. Sci. Hung.* 1, 5-20(1950)(in German).—Sartorius muscles were suspended in chambers in which they were exposed to different concns. of H_2SO_4 vapors. The water content of the muscle was detd. from wet wt. and dry wt. (*in vacuo* at 100°). From these detns. a characteristic curve for the dependence of the lowering of H_2O content as a function of the vapor pressure is constructed. Similar curves for NaCl solns. of egg white proteins show a marked difference. If muscle and isotonic NaCl solns. are equilibrated in a vacuum desiccator, the muscle loses more H_2O than the NaCl soln. This indicates the role of swelling in muscle. If one sartorius is suspended in concn. Ringer soln., a 2nd one in a Ringer soln. of the same concn. contg. 1.5% lactic acid and no $NaHCO_3$ the weight loss of both muscles is 16% in 20 to 30 min. Subsequently, during the following 30 min., the "acid" muscle takes up H_2O , whereas the other one shows a greater wt. loss. This indicates swelling of fresh muscle. Gertrude B. Perlmann

ERNST, E.; TIGYI, J.

The role of tension in the decrease of muscular volume. Acta physiol.
hung. 2 no.3-4:243-251 1951. (CIML 22:1)

1. Of the Institute of Biophysics of Pecs University.

ERNST, E.; BALOG, J.; TIGYI, J.; SIEBES, A.

Volume decrease and crystallization in muscle and myosin. Acta physiol.
hung. 2 no.3-4:253-259 1951. (CLML 22:1)

1. Of the Institute of Biophysics of Pecs University.

ERIEST, E.; TIGYI, J.

Active and automatic constituents of muscle function. Acta physiol.
hung. 2 no.3-4:261-270 1951. (CLML 22:1)

1. Of the Institute of Biophysics of Pecs University.

ERNST, E.; IADANYI, G.; TIGYI, J.

Mechanical function and crystallization in muscle. Acta physiol. hung.
2 no. 3-4:271-279 1951. (CLML 22:1)

1. Of the Institute of Biophysics of Pecs University.

KRMIST, E.; TIGYI, J.; ORKONYI, J.

Frequency and time relationships in muscle volume decrease. Acta physiol.
hung. 2 no.3-4:281-291 1951. (CLML 22:1)

1. Of the Institute of Biophysics of Pecs University.

REKNU T, E.

~~Chemical Abstracts~~,
v. 47, July 10, 1953,
Biological Chemistry

Thermosmosis and biological concentration work. B.
Kroet and L. Homola (Univ. Pécs) *Acta Physiol. Acad.
Sci. Hung.* 3, 487-505 (1952) (in German).—A large no. of
thermosmotic expts. are described by using in part dried
protein membranes. Maintaining a temp. difference be-
tween the media on both sides of the membrane results in a
flow of solvent from the warmer to the colder side. A small
puncture in the membrane maintains equal hydrostatic
pressure on both sides of the membrane, by allowing the
soln. to flow back in an amt. equal to that of solvent dif-
fused through the whole membrane by thermosmosis.

Peter Pernfeld

(3)

KERNST, I.

Synthetic experiments in the group of active hypotensive alkaloids. Pt.32. Coll Cz Chem 29 no.1:266-273 Ja'64

1. Forschungsinstitut fur Pharmacie and Biochemie, Prag.

ERNST, J.

Occasional difficulties in brewing. [J. Ernst, *Brauereitechnik*, 1953, 6, 97-101].—Recommendations are made for offsetting variations in raw materials and manufacturing conditions which

lead to beers of inferior quality. Careful supervision of bottling techniques even after manufacture; greasy glasses and unsuitable retail storage conditions can adversely affect foam stability. [J. N. Tressler]

~~ERNEST J. BROWNE~~

Potassium permeability of muscle. Acta physiol. hung. 4 Suppl:13-16
(CML 25:1)
1953.

1. Of the Institute of Biophysics of Pecs University.

ERNST, E.

W U N G .

Capillary thermodiffusion. E. Ernst and D. Makarev. U.S.S.R. Academy of Medical Sciences. Institute of Biophysics. Moscow. 1957, p. 122-129. Glucose and $MgSO_4$ solution (0.5M , 2×10^5) are drawn along in horizontal glass capillaries of 3.4 and 0.5 mm diameter at constant rates of $50-300$ ml/min. while the capillary is warmed by a wire spiraled with a current. The temp. is recorded by thermocouples in the core of the fluid flowing out at the end of the capillary and samples are taken by means of a thin needle from the core and wall fracture. The concn. of the solutes increases in the direction from the wall towards the core. The increment is the greater the higher the temp. between $1-7^\circ$ though the temp. difference between core and outer layer is only 2° . The concn. increase is explained as capillary thermodiffusion. On the basis of calculations of the relevant parameters in the kidney tubules it is suggested that capillary thermodiffusion plays a rôle in the formation of urine.

A. B. A. Berezovskaya

ERNST J.

Biophys. Inst., Med. Univ., Pecs. "Über die Entstehung der Querstreifung. Origin
of striations in muscle ACTA PHYSIOL. ACAD. SCIENT. HUNG. (Budapest) 1954, 5/suppl.
(20-21)

SO: EXERPTA MEDICA, Section II Vol. 7 No. 11

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ERNST, E.

HUNG.

Tension and water content of the muscle. E. Ernst, J. Tigray, and J. Tugy (*Acta physiol. Acad. Sci. Hung.*, 1953, 6, 135-143).—Elongation of a muscle increases its water uptake and heat and lactic acid production. Frog muscles lose wt. when kept stretched in Ringer's soln. at 0-2%. The max. loss is attained in 4-30 hr. depending on the thickness of the muscle. When a stretched muscle is relaxed after it has attained its max. wt. loss, its wt. increases but the original wt. is not regained completely and the process is about 3 times as slow. A sartorius stretched by 1/4 of its length becomes "tachonic" with a 0.75% Ringer's soln. The observed pressure change of 1.3 atm. could not be accounted for on the assumption that the muscle is an osmotic bag or that it is an inhibition system. While the former assumption is quite untenable the latter is a possibility.
A. H. L. BEZHAK.

ERNSTEIN

HUNG A

Is the muscle an osmotic bag? E. Ernst and J. Tigray. *Acta Physiol. Acad. Sci. Hung.*, 1954, 6, 145-153. Muscle is a complex structure made up of skin and innervation system. Frog Ringer's soin, give off 15% of their water content while their dry matter, ash, K, and P content varies irregularly. Unstretched controls do not loss water. Stretched muscles do not lose wt. in 0.75%. Ringer but lose K and P compared to unstretched controls. The latter take up 15-20% water, give off some K and P, while their dry matter and ash content remains practically unchanged. Water and electrolytes move in and out of muscles independently of one another.

A. B. L. BEINAK.

ERNST, E.

HUNG.

State of potassium in the muscle. E. Ernst, J. Scibolek, and P. J. Kováček (*J. f. physiol., Acad. Sci. Hung.*, 1953, **6**, 155-170) -- When muscle chilled to -70° or 0-2° is extracted with distilled water only 40-50% of its K is released although K added to it is homogeneously distributed. -- When the muscle is extracted with different NaCl, KCl + sucrose, and CaCl₂ soln. only 10-20% of the total K remains in the musc. -- Dry glycogen extracts all the water of the muscle but only 50-60% of K, though added K is evenly distributed in both phases. It is suggested that part of the muscle K is bound to a non-dissociable complex. A. B. L. BRAZIER.

ERNEST E.

HUNG

Volumic constriction and action current of muscle. E. Ernst, J. Tigray, and M. László (Acta physiol. Acad. Sci. Hung., 1954, 9, 171-180).—Simultaneous record of vol. constriction with the piezoelectric chamber and of action current show a fairly close parallelism. As vol. constriction and action current diminish with fatigue their time curves become prolonged. The parallelism is closer in the change of the latter. This applies to changes caused by cooling to 5-25°. The great increase in the time between action current and mechanical response, on cooling does not happen between action current and vol. constriction. At a low temp. (10°) the vol. constriction disappears sooner than the action current when the muscle is stimulated with frequencies of 100 or 150 Hz. The quick phase of the vol. constriction is part of the "preparatory" phase of muscular contraction which lasts a few msec. Action current, vol. constriction, heat development, transparency change, latency relaxation, and pH change take place in this phase. The mechanical activity follows these and lasts 10 times longer.
A. B. J. Bézák

ERNST, E.

HUNG

Temperature coefficient of the volume constriction of muscle.
E. Ernst, J. B., and T. A. Sebes (Acta Physiol. Acad. Sci. Hung.
1954, 6, 181-190).—The vol. constriction was recorded at 4-14 and
24° in response to identical mechanical effects and was found to be

independent of temp. When the muscle (frog gastrocnemius) is
stimulated with a current of 50 Hz the magnitude of the vol. con-
striction remains independent of temp. but a prolongation takes
place with lowering of temp. There is no difference in these pheno-
mena in direct or indirect stimulation. It is assumed that the vol.
constriction consists of two parts, an initial quick, small phase and a
"tetanoid" slow, large phase. The former is an ionic process. The
latter is brought about by a tension change due to crystal alteration
of myosin. A. B. L. BEHNÄK.

ERNST, E.

Semiconductors and the problem of excitation, Biofizika 1 no.3:
2960300 '56. (MLRA 9:9)

1. Institut biologicheskoy fiziki Universiteta v Pach. Vengriya.
(ELECTROPHYSIOLOGY)

ERNST, E.

✓ 5058. Negative birefringency of muscles after formal treatment.
E. Ernst and L. Bélocski *Acta physiol. Acad. Sci. Hung.*, 1958, 9,
1-6 (Biophysic Inst., Med. Univ., Pécs, Hungary).—Frog muscles
and fibrils of wing muscles of insects were treated with 20% urea
solutions and 12% formal solutions and their optical properties
were examined with a polarising microscope. A negative birefringency
develops as the formalin dries in on the surface, first in the isotropic
parts then in the entire fibre. A somewhat similar picture is seen
when a small amount of formal solution is allowed to dry (and
crystallise) on a thin platinum wire. It is suggested that in the case
of the muscle fibre the formal also forms crystals which are oriented
by the micro-structure of the fibres or fibrils, thereby developing
negative birefringency. It is suggested that this technique may be
used as a method by which cell structures may be studied in a native
state. (German)

A. B. L. BRINAK.

3



Ernst E.

Med

5059. Microstructure of striated muscle. I. "Extraction methods".

II. The long structure. III. The cross-striation. IV. Contracted form. E. Ernst, L. Béleczki and J. Nagy *Acta physiol. Acad. Sci. Hung.*, 1956, n. 7—39 (Biophysic. Inst. Med. Univ., Pécs, Hungary).

I. The optical behaviour of frog muscle fibres and single fibrils of insect muscle was photographically recorded under a polarising microscope in different solutions (Edzall-Weber, distilled water, 0.1% lactic acid, Ringer, etc.) during different stretches and relaxations. It was shown that identical changes in the optical behaviour are brought about by a variety of manipulations, therefore, the disappearance of an optical property (e.g. birefringency) does not prove that it was caused by the extraction of a birefringent substance.

II. Photographic records of native insect muscle fibrillae show the presence of long structures (filaments, protofibrillae) passing uninterruptedly through several anisotropic and isotropic discs; they are much thinner and more delicate in the I disc. The spiral structure could also be photographed. A very great variability of all these optical properties, thickness of the different discs, direction of the windings of the spiral (in the same fibril), thickness of the Z discs in the relaxed and contracted state, was found already in the native fibrils.

III. Hürthle's conclusion that the cross-striation is not a static structural part of the fibril but varies with the waves of contractions and relaxations was confirmed. Not all the longitudinal fibrillae of a fibre are simultaneously contracted but often bundles of fibrillae only. From the optical behaviour of *Hydropsiklus* fibrils under different experimental conditions (application of different solvents, stretch, relaxation etc.) it is concluded that the anisotropic disc in the fibril is caused by an enrichment of myosin, the isotropic disc by less thickly packed actin filaments, the Z line is due to an intrafibrillary stratified organisation, the M disc can only be a thickening of the substance in the anisotropic disc. The changes in

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Bialecki, E. Ernest, and Nagy, J.

optical behaviour of the fibril caused by stretch are attributed to physical and chemical changes in the materials making up the fibril elicited by the stretch.

IV. The tighter packing of the cross striation during contraction is attributed to diminution in height and increase in width of the material between 2 Z bands. It is suggested that during contraction only certain parts of the fibrils contract, others in between are stretched. This stretch elicits a stiffening and a further tension increase caused by crysin. (German) A. B. L. Beznak.

2/2

USSR / Human and Animal Physiology. Neuromuscular
Physiology.

T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41640.

Author : Ernst, E.
Inst : Academy of Sciences Georgian SSR.
Title : On the Problem of Muscle Excitability.

Orig Pub: V sb.: Probl. sovrem. fiziol. nervn. i myshechn.
sistem. Tbilisi, AN GruzSSR, 1956, 415-436 (Prob-
lems of Contemporary Physiology of the Nervous and
Muscular System).

Abstract: A method for the measurement of muscle volume was
elaborated and it was established that during the
latent period of contraction, at the instant of the

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USSR / Human and Animal Physiology. Neuromuscular
Physiology.

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Abs Jour: Ref Zhur-Biol., No 9, 1958, 41640.

Abstract: excitation current, a decrease of volume takes place. It follows that the action current is associated with an increase of ions concentration, in the same manner as the decrease of volume is associated with the decrease of the volume of a solution resulting from hydration of newly formed ions. Change of volume studies were done on muscles of frogs following stimulation similar to excitation and these were able to occur in rhythms of 50, 75 and 100/1 sec. Volume changes were conditioned by K ions. K ions in the muscle exist in a combined form; at the time of excitation they become ionized and at first, leave the muscle fiber only when the permeability is more favorable, as a result of direct stimulation with the current; there was only

Card 2/3

98

ERNST, L.

5060. Intra- and inter-fibrillar Z-structure. E. Ernst and N. Garamvölgyi *Acta physiol. Acad. Sci. Hung.*, 1956, 9, 43-52 (Biophysic. Inst., Med. Univ., Pécs, Hungary).—Fibrils of different muscles of *Hydropsphilus piceus*, other insects and of *Rana esculenta* were pulled apart with 2 micromanipulator needles (1 μ). The photographic records show that neighbouring fibrillae are held together in bundles at the Z-lines by a structure which shows the same optical behaviour as the Z-line; it is proposed that this structure should be called interfibrillar Z-structure. The photomicrograms also show the great stretchability of the interfibrillar Z-structure, from which it is concluded that it is probably not a membrane. The photographs also show the existence of an intrafibrillar Z-structure the optical behaviour of which is the same as that of the interfibrillar Z-structure. It is suggested that the Z line is made up by these two structures which together constitute a system to be called Z-fabric. (German) A. B. L. BEZNÁK.

Med 2

ERNST, E.

The present state of the problem of stimulation. Acta physiol. hung.
11(Suppl):9-11 1957.

1. Biophysikalisches institut der medizinischen universitat. Pecs.
(MUSCLES, physiol.
membrane theory of stimulation (Ger))

FRNST, EUGEN

Science

Die Muskeltatigkeit; Versuch einer Biophysik des quergestreiften Muskels.
Budapest, Verlag der Ungarischen Akademie der Ungarischen Akademie der
Wissenschaften, 1958. 355 p. (Muscular activity; a biophysical investi-
gation into the striped muscle)

Monthly List of East European Acessions (EEAI), LC, Vol. 8, No. 3, March 1959
Unclass.

ERNST, E.

AUTHOR: Troshin, A. S., Doctor of Biology SOV/30-58-7-22/49

TITLE: News in Brief (Kratkiye soobshcheniya) The Second International Conference on the Mechanism of Stimulation (Vtoroye mezhdunarodnoye soveshchaniye po mekhanizmu vozbuздeniya)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 7, pp. 103 - 104 (USSR)

ABSTRACT: The conference was held at the Humboldt-University (Universitet im. A. Gumbol'dta) in Berlin, in the DDR (German Democratic Republic)(GDR) from March 31 to April 2. It was attended by physiologists, biochemists and biophysicists, who with respect to the mechanism of stimulation, take two different views. One group proceeds from the albumin theory developed by D.N.Masonov and his students. The other group relies on the principles of the diaphragm theory proposed by A.Hodgkin, and the Cambridge School(kembridzhskaya shkola) of physiologists. 24 reports were submitted. They are partly listed below:
1)V.Ya.Aleksandrova (USSR) on the Albumin Theory of Injury and Stimulation.
2)B.N.Tarusov (USSR) on Electrical Parameters of the Cells in

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News in Brief. The Second International Conference
on the Mechanism of Stimulation

SOV/30-58-7-22/49

Different Functional States.

- 3)E.Ernst, Hungary (Vengriya) showed that individual fibrils react to every electrical irritation by a distinctive contraction.
- 4)G.M.Frank, USSR, on Structural Changes in Nerve Fibers Caused by Excitation.
- 5)A.Kaladzhilyeva, Bulgaria (Bulgariya), A. Wolf (Vol'f), V. Linke, DDR, Ye.M.Makovskiy, Roumania (Rumyniya) investigated the properties of solutions of native albumins.
- 6)G.Vogel (Fogel'), G.Krause (Krauze), G.John(Dzhon), DDR, described the results obtained by the investigation of the influence **exercised** by temperature and various poisons of fermentation on the monodular (monodal'nyy) active current.
- 7)G. Lippmann, E.Schubert (Shubert), DDR, on the Influence **exercised** by Metabolism Upon the Process of Cell-Excitation.
- 8)E.Gutman, Ts.Vodichka, Czechoslovakia (Chechoslovakiya) on Impulseless Processes in Nervous Structures.
- 9)L.Lyubinskaya, Poland (Pol'sha), K.Cheng, China (Kitay), on the Morphological Structure of Some Elements of the Nervous System.

Card 2/3

News in Brief, The Second International Conference
on the Mechanism of Stimulation

SOV/30-58-7-22/49

An animated discussion of the reports took place after the
papers had been read.

Card 3/3

ERNST J.
EXERPTA MEDICA Sec 2 Vol 11/7 Physiology July 58

3027. CAN MUSCLE DIFFERENTIATE BETWEEN ITS OWN POTASSIUM AND SUPPLIED POTASSIUM? - Unterscheidet der Muskel zwischen eigenem Kaliumgehalt und eingeführtem Kalium? - Ernst J. Biophys. Inst., Med. Univ., Pécs - ACTA PHYSOL. ACAD. SCI. HUNG. 1958, 12/suppl. (79)

The muscle in K-rich Ringer solution can take up 10% of K. K is emitted to the same extent in normal Ringer solution again. The K taken up is retained. It is situated mainly in the sarcoplasm. The original K is bound in the fibrils.

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

2999. Z-STRUCTURES IN STRIATED MUSCLE FIBRES - Über die Z-Gebilde
des quergestreiften Muskels. Ernst E., Garamvölgyi M. and
Guba F. Biophys. Inst., Med. Univ., Pécs - ACTA PHYSIOL. ACAD.
SCI. HUNG. 1958, 14/suppl. (40)

Acid-resistant Z-structures in and between striated muscle fibres have been de-
tected and isolated. On electronmicroscopical investigations the matrix of these
structures was found to be a reticulum. Boeles - Amsterdam

ERNST, Jeno

The Institute of Biophysics of the Pecs School of Medicine. Fiz
szemle 9 no.6:195 Je '59..

ERNST, E.; TIGYI, J.; NIEDETZKY, A.

Cardiac automatism and radioactivity. Acta physiol. hung. 16
no.2:61-69 1959

1. Biophysikalisches Institut der Medizinischen Universität, Pecs.
(HEART, physiol.)
(POTASSIUM, radioactive)

ERNST, E.; NIEIETZKY, A.; HAJNAL, M.

Energy storage in reversible arrest of the heart by ~~ECG~~. Acta physiol.
hung 16 no.2 71-76 1959

1. Biophysikalisches Institut der Medizinischen Universität, Pécs.
(HEART ARREST, exper.)
(CHLORIDES; pharmacol.)

ERNST, E.; HAJNAL, M.

Distribution and form of potassium in the muscle. Acta physiol. hung.
16 no.2:77-86 1959

1. Biophysikalisches Institut der Medizinischen Universität, Pécs,
(MUSCLE, chemistry)
(POTASSIUM, chemistry)

ERNST, E.

New biology. Acta physiol. hung. 19 no.1-4:51-55 '61.

1. Institute of Biophysics, Medical University, Pecs.
(BIOCHEMISTRY) (BIOPHYSICS)

STRAUB, F. Bruno; ERNST, Jeno; JUVANCS, Irreheus; BALOGH, Janos;
SZENTAGOTHAI, Janos, dr.; TORO, Imre, dr.; BALINT, Andor;
BARTUSZ, Lajos

An account of the 1962 work made by the directorate of the
Biological Section. Biol tud kozl MTA 5 no.3-4:165-202 '62.

1. "A Magyar Tudomanyos Akademia Biologiai Tudomanyok Osztalya-
nak Kozlemenyei" szerkesztoje (for Straub). 2. "A Magyar
Tudomanyos Akademia Biologiai Tudomanyok Osztalyanak
Kozlemenyei" szerkeszto bizottsagi tagja (for Szentagothai
and Toro).

HUNGARY

ERNST, E., BENEDECKY, S.; Biophysical Institute and Central Laboratory of the Medical University (Orvostudomanyi Egyesület Biofizikai Intézete as Kozponti Laboratoriuma), Pécs.

"The Lamellar Structure of the Striated Fibril."

Naturhist., Acta Physiologica Academiae Scientiarum Hungaricae, Vol. 12, No. 3-4, 1962, pp. 211-221.

[English article; authors' English summary abridged.] The authors discuss contradictions between current conceptions of the structure of the striated muscle fibril and experimental observations. Data in the literature and their own observations are interpreted in terms of a new hypothesis. They caution against the formulation of premature theories. Their hypothesis assumes a longitudinal and transversal lamellar structure of the fibril. [Of 19 references 3 are Hungarian and the rest western.]

HUNGARY

ERNST, E., Institute of Biophysics, Medical University
(Orvostudomanyi Egyetem Biofizikai Intezete), Pecs.

"Probability and Stability in Biology."

Budapest, Acta Physiologica Academiae Scientiarum Hungari-
cag, Vol 22, No 3-4, 1962, pp 331-339.

Abstract: [English article; Author's English summary]
The teachings of statistical mechanics and thermodynamics
about probability and stability, when properly applied,
are very helpful in understanding biological phenomena
which seemingly contradict the basic theses of these sci-
ences. This statement is contrasted with some other state-
ments in the biological literature. [Of 19 references, about
one-third are Hungarian.]

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A _____

ERNST, Jeno, akademikus, egyetemi tanar

Theory of relativity and the popularization of natural sciences.
Magy tud 70 no.3:201-202 '63.

1. Orvostudomanyi Egyetem, Pecs.

HUNGARY/Electronics - Electron and Ion Emission

n-2

Abstr Jour : Ref Zhur - Fizika, No 11, 1958, No 25630

Author : Ernst Lajos
Inst : Industrial Research Institute for Telecommunications, Budapest,
Hungary.

Title : Long Time-Constant Decay Effect of Oxide-Coated Cathodes

Orig Pub : Acta phys. Acad. sci. hung., 1957, 7, No 4, 473-475

Abstract : A study was made of the slow decrease in emission of an oxide cathode in one type of receiving tube. Simultaneously the author has measured the increase in resistance of the interlining between the oxide and the coro, using the Van der Ziel method. A unique connection has been established between the two processes.

Card : 1/1

ERNST, Lajos

Ión wall pump. Fiz szemle 9 no.6:176-181 Je '59.

l. M iradasteknikai Kutato Intezet Ipari Elektromos Laboratorium.

ERNST, Lajos

The ion wall pump. p. 176.

FIZIKAI SZEMLE. (Eotvos Lorand Fizikai Tarsulat) Budapest, Hungary, Vol. 9, no. 6, June 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11, November 1959.
Uncl.

ERNST, Lajos, tudományos munkatárs (Budapest)

Ultravacuum engineering. Term. tud. kozl. 4 no.71209-300 J1 '60.

ERNST, L. K.

"The Comparative Characteristics of the Growth and Development of East Friesian and Hereford-East Friesian Calves." Cand Agr Sci, Division for the Development of Cattle, All-Union Sci-Res Inst of Animal Husbandry, Moscow, 1954. (KL, No 7, Feb 55)

SO: Sum. No. 631, 26 Aug 55- Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions.
(14)

ERNST, L.K.

Comparative description of the growth, development and certain
morphophysiological features of young Holstein and Hereford-
Holstein cattle. Trudy Inst.morf.zhiv. no.31:110-116 '60.
(MIRA 13:6)

1. Vsesoyuznyy institut zhivotnovodstva.
(Cattle breeds)

ERNST, L.K., kand.sel'skokhoz.nauk (g. Moskva)

Significance of artificial insemination for increasing productivity
of cattle breeds. Bio. v shkole no.2:77-80 Mr-Ap '61. (MIRA 14:3)
(Cattle breeding) (Artificial insemination)

ERNST, L.K., kand.sel'skokhozyaystvennykh nauk

Results of judging herd bulls of various breeds according to the
quality of their progeny. Agrobiologiya no.4:566-576 Jl-Ag '62.
(MIRA 15:9)

1. Vsesoyuznyy institut zhivotnovodstva.
(BULLS)

ERNST, L. K.

"Rational use of sire-bulls in artificial insemination."

report submitted to 5th Intl Cong, Animal Reproduction & Artificial Insemination,
Trent, Italy, 6-13 Sep 64.

KRAMARENKO, Nikoley Mikhaylovich, nauchn. sotr., kand. sel'khoz. nauk; SEMENOV, Nikolay Petrovich, nauchn. sotr., kand. sel'khoz. nauk; ERNST, Lev Konstantinovich; FEFERMAN, A.Ye., red.

[Practices in breeding work with black and white cattle]
Opyt plemennoi raboty s krupnym rogatym skotom Chernopestroi porody. Moskva, Rossel'khozizdat, 1965. 78 p.
(MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhivotnovodstva (for Kramarenko, Semenov).

ERNST, P., promovany ekonom

Automation of the operational planning of large-scale machine production. Podn org 18 no.5:231-233 My '64.

ERNST, Pavel, promovany ekonom

Standardization in organization and management. Pod org 17 no.4:
171.-172 Ap '63.

ERNST, R.

Yugoslavia (430)

Technology

The used ultrasonic irradiation in the tanning process p. 415.
Nova Proizvodnja, Vol 2, no. 6, December 1951.

East European Accessions List. Library of Congress, Vol. 2, no. 3,
March 1953.
UNCLASSIFIED.

MIKHALKEVICH, M.F., glav. red.; SAFONOV, A.V., red.; KRIKESKIY, L.I.,
red.; BROUN, R.M., red.; BOMBELO, I.A., red.; E-NST, V.I.,
red.; KRIZHAK, B.Ye., red.; KYZHIKOV, A.N., red.; MEMESHKELIA,
L.I., tekhn. rod.

[The nature of Sakhalin and man's health] Priroda Sakhalina i
zdrorov'e cheloveka; sbornik statei. I Uzhno-Sakhalinsk, Sakha-
linskoe knizhnoe izd-vo, 1962. 181 p. (MIRA 15:11)

1. Geograficheskoye obshchestvo SSSR. Komissiya meditsinskoy
geografii Sakhalinskogo otdela.
(SAKHALIN—MEDICAL GEOGRAPHY)

COUNTRY	: USSR
CATEGORY	: Human and Animal Physiol., Neuromuscular Physiol.
ABS. JOUR.	: RZhBiol., №. 5 1959, №. 22384
AUTHOR	: Tidi, Y.; Ernst, Y.
INST.	: Academy of Sciences of the USSR
TITLE	: The Exchange of Phosphorus and Potassium Isotopes in Functioning Muscle.
ORIG. PUB.	: V sb.: Usuch. zhivotn. organizma, №., AN SSSR, 1958, 112--115
ABSTRACT	: One sartorius muscle was subjected to indirect stimulation in Ringer's solution containing the isotopes, and the other sartorius (of the same frog) was stimulated directly. Both sartorius muscles were included sequentially in a chain of stimulation. A 50 cycle current was used; stimulation lasted 0.5 to 2 seconds. With indirect stimulation the potassium content and specific radioactivity of the tissue remained unchanged. With direct stimulation an 18% reduction in potassium content was noted and a simultaneous increase by 26% in specific activity. In
Card:	1/2

T-75

ERNSZT, Tibor

Relationship between the technical development fund and the innovators' movement. Ujít lap 13 no. 7:7-8 Ap '61.

1. Penzugyminiszterium Ipari Osztalyanak helyettes vezetője, Budapest.

(Hungary—Technology)
(Hungary—Industrial management)

LÉNYEI László

EXCERPTA MEDICA Sec.11 Vol.8/11 O.RIL Nov 1955

2211. ERNYEI L. "Cementipari munkások felső légutaknak elváltozásai. Changes
in the upper airways in cement workers NEPEGESZSÉGPÖGY
1954, 35/10 (273-275)

Twenty-one of 40 workers in a cement works showed nasal, pharyngeal and laryngeal symptoms. In 31 the vibrissae were damaged. As regards the mucous membrane, the inflammatory changes first predominated for some time, later the atrophic changes. With reference to the changes observed the question of the necessity of periodical oto-rhino-laryngological examination of workers in the cement industry is discussed.

Author (XVII, 11)

MRNYEY, Istvan, dr.

The treatment of influenza with atebrin. Orv. hetil. 96 no.31:
864 31 July 55.

1. Osongrad megye Tanacs V.B. Egészségügyi Osztalyanak
(osztalyvezető: Gajdán Erno dr.) korlemenye.
(QUINARCINE, ther. use,
influenza (Hun))
(INFLUENZA, ther.
quinacrine (Hun))